

CLASS EXERCISES

Tell what you would do first to solve each equation for x . Do not solve the equations.

1. $ax = f$

2. $cx + d = e$

3. $x - p = q$

4. $t - x = r$

5. $nx - s = c$

6. $a(x - 1) = 7a$

7. $ax + 9 = cx$

8. $\frac{x}{a} = c, a \neq 0$

9. $\frac{bx}{a} = d, a \neq 0$

10. $ax - bx = c$

11. $\frac{x-2}{2} = m + n$

12. $\frac{2}{5}(x + 1) = g$

13. $\frac{2}{3}x = g$

14. $g\left(x + \frac{2}{3}\right) = 1$

15. $x + 1 = g + \frac{2}{3}$

PRACTICE EXERCISES

Solve for x and indicate any restrictions on the values of the variables.

1. $ax = c$

2. $bx = a$

3. $x + d = e$

4. $p + x = q$

5. $m - x = n$

6. $f - x = d$

7. $\frac{x}{b} = k, b \neq 0$

8. $\pi x = 7\pi$

9. $nx + p = r$

10. $rx + 8 = e$

11. $cx - d = e$

12. $bx - 3 = f$

13. $\frac{x}{a} + b = c, a \neq 0$

14. $\frac{x}{b} + 6 = d, b \neq 0$

15. $\frac{x}{a} - 5 = b, a \neq 0$

16. $\frac{x}{b} - c = d, b \neq 0$

17. $ax + bx = c$

18. $bx - cx = -c$

Solve each formula for the indicated variable. Indicate any restrictions on the values of the variables.

19. $A = \frac{1}{2}bh$, for h

20. $s = \frac{1}{2}gt^2$, for g

21. $V = lwh$, for w

22. $I = prt$, for r

23. $V = \pi r^2 h$, for h

24. $S = 2\pi rh$, for r

Solve for x and indicate any restrictions on the values of the variables.

25. $bx + a = dx + c$

26. $cx - b = ax + d$

27. $6bx + c = 2c - 3bx$

28. $8cx - e = 3e + cx$

29. $a(x - 3) + 8 = b(x - 1)$

30. $c(x + 2) - 5 = b(x - 3)$